

ABSTRACT OF THE DISCLOSURE

A method for forming narrow trench structures. A substrate covered by a layer to be defined is provided. A plurality of oxidable first masking islands is formed on the layer to be defined. Thereafter, the first masking islands are oxidized to form an oxide layer on the sidewall and the upper surface of each first masking island. A second masking island is formed in each gap between the oxidized first masking islands. The oxide layers are subsequently removed to form narrow openings between the first and second masking islands, having a width substantially equal to the thickness of the removed oxide layer. The layer to be defined underlying the narrow openings is etched to form the narrow trench structures on the substrate. Finally, the first and second masking islands are removed.